



PATENT APPLICATION
Mo6476
LeA 34,678

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION OF)
MARTIN MELCHIORS ET AL) GROUP ART UNIT: 1711
SERIAL NUMBER: 09/928,853) EXAMINER: RABON A. SERGENT
FILED: AUGUST 13, 2001)
TITLE: AQUEOUS DISPERSIONS)

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

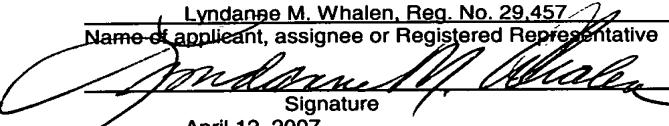
Sir:

This Reply Brief is submitted to rebut certain arguments raised in the
Examiner's Answer of February 12, 2007

1. It is asserted at page 8, line 4 of the Answer that the data provided in
the declarations and the application in support of patentability are not commensurate
in scope with the presently claimed invention. Appellants respectfully disagree with
this assertion.

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Name of applicant, assignee or Registered Representative


Signature
April 12, 2007
Date

First, Appellants regret that the description of the comparison data was viewed as misleading, as this was not in any way intended. As set forth by the Examiner in the Answer in the middle of page 7, numerous comparisons were provided. Appellants concede that not every possible combination of a polyester, polyether, or polycarbonate polyol with an aliphatic and aromatic isocyanate was undertaken or presented.

However, and as would be understood by one skilled in the art, the difficulties in achieving a stable aqueous dispersion and obtaining suitable coatings are not, by and large, due to the choice of a particular polyol or a particular isocyanate. If this were the case, then wide variations in the properties of the coatings would be seen in Appellants' data presented to illustrate the present invention. Obviously, this is not the case. Thus, the Examiner has failed to recognize a truly inventive aspect of the present invention, the ability to achieve a stable dispersion and adequate coating with the blocked isocyanates. This achievement is clearly not consistent with the Examiner's position that there is such unpredictability among isocyanates and polyols that Appellants are not entitled to a broad claim.

2. Related to the above issue is the Examiner's assertion in the middle of page 8 (lines 12-19) of the Answer that the data showing criticality of order of addition is not representative of the relied upon prior art, because the polyester and isocyanate used in Appellants' comparison are not identical to those used in the reference. Appellants' choice of ingredients was explained previously. Moreover, Appellants have demonstrated that for a particular composition, when the blocked isocyanate is added at the wrong time (after creation of the dispersion) the coating is unsuitable. The fact that slightly different ingredients (as compared to Blum et al.) are used does not detract from Appellants' showing that sequence of addition does affect the coating composition. Interestingly, when Appellants follow the primary teaching of Blum et al., i.e. adding the blocked isocyanate after creation of the dispersion, the coating was unacceptable, whereas the single sentence regarding addition of the blocked isocyanate before the dispersion is supposed to provide

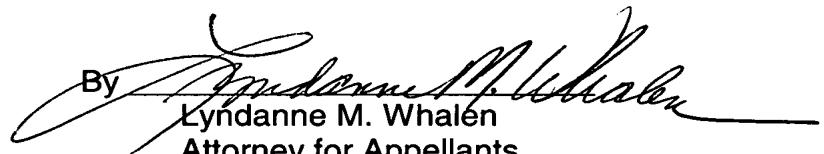
adequate guidance for preparation and render the coatings of the present invention obvious. Appellants submit that one skilled in the art who had not had the benefit of reading their specification would not construe the teachings of Blum et al in the manner suggested by the Examiner.

3. Finally, Appellants disagree with the assertion at the bottom of page 9 of the Answer that Blum et al is considered to teach how to disperse blocked polyisocyanates. While not explicitly stated, Appellants assume that the blocked isocyanates to which the Examiner refers are those of the present invention.

Appellants agree that Blum et al states that hydrophilic urethane-modified polyester resin can perform the function of an emulsifier to disperse hydrophobic crosslinkers, which cannot be dispersed on their own. However, Appellants are not trying to disperse hydrophobic isocyanates on their own, so the relevance of this teaching to Appellants' invention is unclear. The differences in the composition of the present invention as compared to Blum et al are not given adequate consideration by the Examiner. More specifically "hydrophobic crosslinkers" is asserted to embrace all hydrophobic moieties, including the blocking agents of the present invention, even though Blum et al does not teach these blocking agents. More importantly, Appellants' own data show that the blocked isocyanates used in the present invention are not in fact "emulsified" by the polyurethane-containing polyesters or polyethers if they are added to the polyester or polyether resin after creation of the dispersion.

Appellants submit that Blum et al. and Hughes et al. do not teach or suggest how to incorporate the specific blocked isocyanates of the present invention into an aqueous dispersion, either alone or in combination. Claims 1-7 and 9-11 are not therefore obvious in view of Blum et al. combined with Hughes et al. Withdrawal of the §103 rejection and a Notice of Allowance is respectfully requested.

Respectfully submitted,

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